Yukon Influenza Surveillance Report

Influenza Season: 2010-2011

Summary Report

FluWatch Weeks 5-8 (January 30 – February 26, 2011)

*** All data are provisional and subject to change as information is received.

Written: March 1, 2011

THIS ISSUE:

Laboratory Reports	2
Community Health Centres	3
WGH Emergency Visits	3
Sentinel physicians/sites	4
HealthLink 811	4
Outbreaks	5
FluWatch Report Highlights	5-6
Influenza Web Sites	7
Acronyms	7
Yukon Map	7
YCDC Information	7

Report Highlights

This surveillance report, produced by YCDC, summarizes influenza activity in the Yukon for the 2010-2011 season, during weeks 5-8 (January 30- February 26, 2011).

2010-2011 FluWatch Weeks Calendar:

http://origin.phac-aspc.gc.ca/fluwatch/10-11/10-11cal-eng.php

During weeks 5-8 several respiratory viral detections have been made within the territory, including: influenza A (H3), RSV, adenovirus, parainfluenza and rhino/enterovirus.

During week 6 Yukon had its first hospitalized case with confirmed influenza (A/H3).

Influenza Severe Outcomes

This section will update any severe outcomes such as hospitalizations and deaths that are attributed to influenza during the 2010-2011 season.

During week 6 there was one hospitalization due to influenza.

FluWatch Reporting

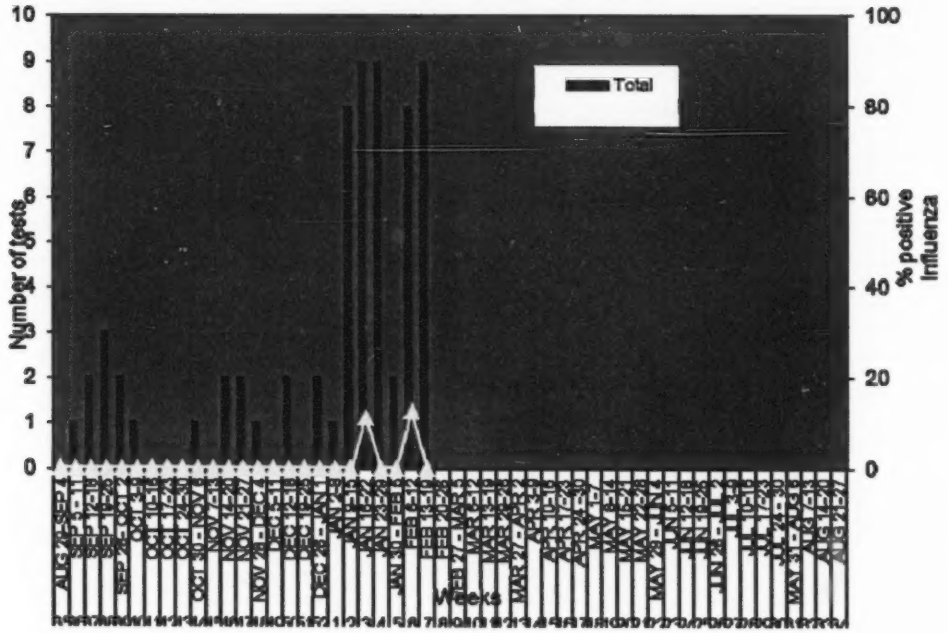
Based on FluWatch activity level definitions, Yukon has reported the following activity levels:
FluWatch activity level definition: ***http://origin.phac-aspc.gc.ca/fluwatch/10-11/def10-11-eng.php***

Week 5,7,8	No laboratory-confirmed influenza detections in the reporting week, however, sporadically occurring ILI may be reported
Week 6	Sporadic influenza activity - sporadically occurring ILI and lab confirmed influenza detection(s) with **no outbreaks** detected within the influenza surveillance region

Laboratory Reports

One influenza positive result was received during week 6. The number of respiratory viral specimens submitted for testing has remained increased during weeks 5-8.

Influenza Virus Detections & Percentage of Respiratory Specimens Diagnosed Positive

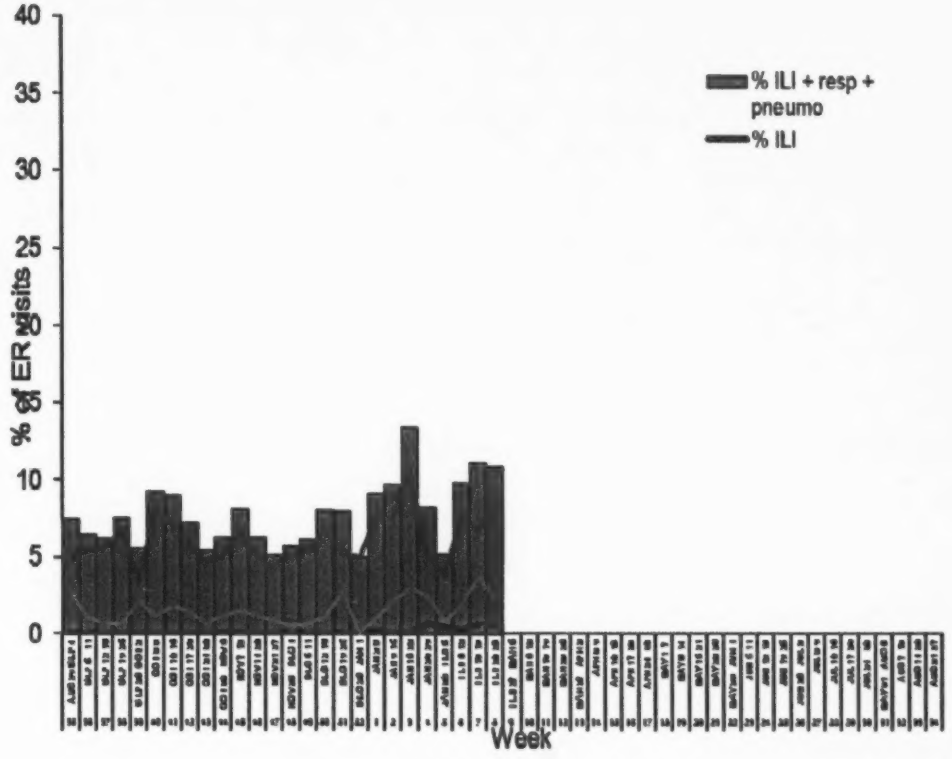


Communities with Laboratory Confirmed Influenza

During weeks 5-8 no community residents were identified as having lab-confirmed influenza.

Whitehorse General Hospital Emergency Visits

During weeks 5-8 the proportion of presentations to the WGH emergency department for respiratory symptoms was increased.

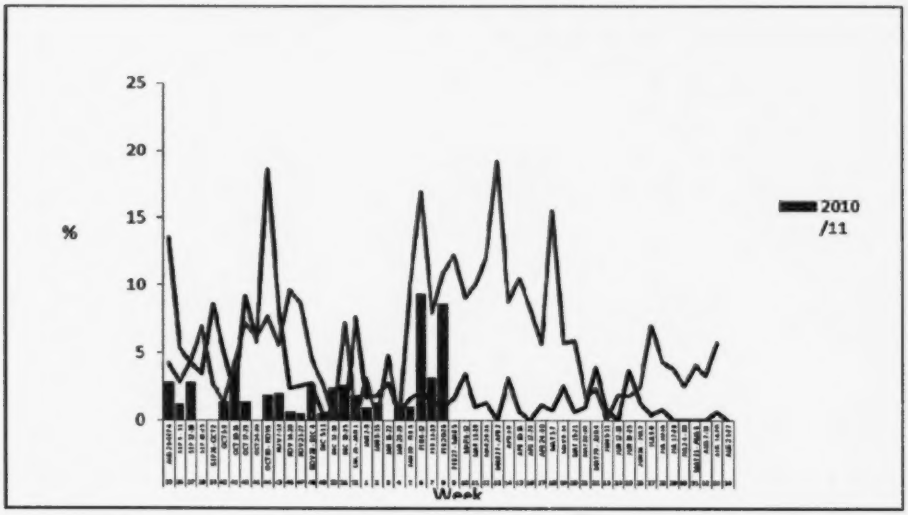


Percent of WGH ER visits with influenza-like illness (ILI), other respiratory symptoms, or pneumonia by week

Sentinel physicians/sites

The percentage of patients presenting to sentinel physicians or sites with ILI during weeks 5-8 was between 1.0-9.4%. Increases in ILI visits occurred during weeks 6 and 8. During the 2008/09 season, an average of five sentinel reports were received each week. A new recruitment of sentinel physicians and sites occurred in July 2009. There are presently 18 sentinel physicians/sites across the territory; during weeks 5-8, an average of 33% of sentinels reported. Yukon's sentinel surveillance system is comprised of all rural Community Health Centres, the Whitehorse General Hospital and participating physicians.
(FluWatch Sentinel Surveillance Information ***http://origin.phac-aspc.gc.ca/fluwatch/sent-eng.php***)

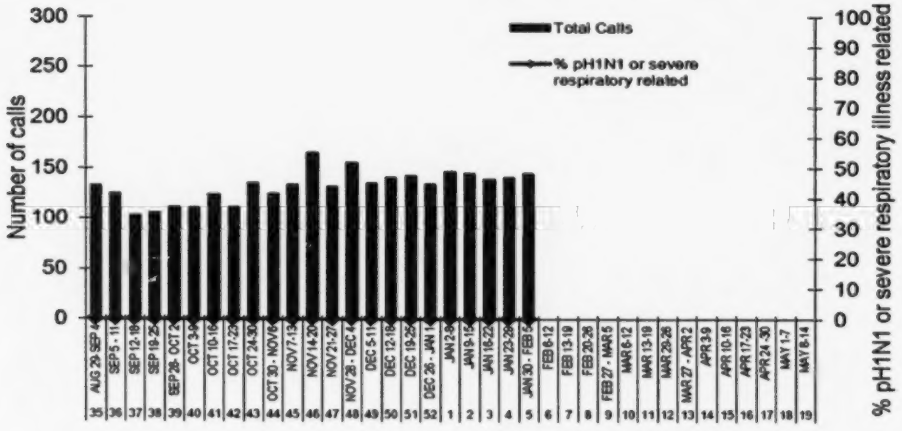
Percentage with ILI, visits to sentinels by week



HealthLink 811

The graph below shows the percentage of calls related to influenza or severe respiratory illness.

Number of calls and percentage related to influenza or severe respiratory illness by week



Outbreaks
Definitions of ILI/Influenza outbreaks for the 2010-2011 season
http://origin.phac-aspc.gc.ca/fluwatch/10-11/defI0-11-eng.php

Facilities
No facility outbreaks have been reported during weeks 5-8.

Schools
There have been no reports of school outbreaks reported during weeks 5-8.

Obtained from: BRITISH COLUMBIA INFLUENZA SURVEILLANCE BULLETIN 2010-11: Number 14 Week 7 February 13 to 19, 2011

CANADA

FluWatch
During week 6 ending February 12, 2011, localized influenza activity in Canada continued to be reported in several regions. The influenza-like illness (ILI) consultation rate remained within the expected range for this time of year. One thousand two hundred and eighty specimens (20.2% in week 6) tested positive for influenza, a slight increase from the previous week (19.8%): 420 A/H3N2, 653 unsubtyped influenza A, 88 pandemic H1N1, and 119 influenza B. Specimens were reported from all provinces; influenza A activity was mainly concentrated in ON, QC, AB, and NB. During week 6, 33 new paediatric hospitalizations and 39 new adult hospitalizations related to influenza were reported through IMPACT and CNISP networks. This is a decrease for paediatric hospitalizations and increase for adult hospitalizations over previous weeks. In Ontario, during week 6, 408 influenza laboratory confirmed cases were detected with 18.3% positivity; a decrease from the previous week. The overall ILI consultation rate has decreased from 39.5/1,000 patient visits in Week 5 to 38.7/1,000 patient visits in Week 6. In Quebec during week 6, 460 (22%) tested specimens were positive for influenza. www.phac-aspc.gc.ca/fluwatch/

National Microbiology Laboratory (NML): Strain Characterization
Between September 1, 2010 and February 18, 2011, two hundred and seventy-three influenza isolates were collected from provincial and hospital labs and characterized at the NML as follows:
159 A/Perth/16/2009 (H3N2)-like¶ from NB, QC, ON, MN, SK, AB & BC;
52 A/California/07/2009 (H1N1)-like* from NS, NB, QC, ON, AB & BC;
61 B/Brisbane/60/2008 (Victoria lineage)-like† from NB, QC, ON, SK, AB & BC;
1 B/Florida/04/2006-like (Yamagata lineage)-like‡ from BC
¶ indicates a strain match to the recommended H3N2 component of the 2010-11 northern hemisphere trivalent influenza vaccine
* indicates a strain match to the recommended H1N1 component of the 2010-11 northern hemisphere trivalent influenza vaccine
† indicates a strain match to the recommended influenza B component of the 2010-2011 northern hemisphere trivalent influenza vaccine
‡ indicates a strain match to the recommended influenza B component of the 2008-2009 northern hemisphere trivalent influenza vaccine

NML: Antiviral Resistance

Drug susceptibility testing at the NML between September 1, 2010 and February 17, 2011 indicated that all but one A/H3N2 and all pandemic H1N1 isolates were resistant to amantadine. All the isolates (137 A/H3N2, 47 pandemic H1N1, 53 type B) tested for zanamivir and (138 A/H3N2, 50 pandemic H1N1, 52 type B) oseltamivir resistance showed susceptibility.

INTERNATIONAL

Northern Hemisphere: During week 6 ending February 12, 2011, influenza activity had increased in the United States www.cdc.gov/flu/weekly/. Three thousand three hundred and six specimens (out of 9,448, or 35.0%) tested positive for influenza in week 6: 773 pandemic H1N1, 1,021 A/H3, 804 unsubtyped influenza A, and 708 type B. The proportion of ILINet physician visits for ILI was 4.5%, which was above the national baseline of 2.5%. The CDC further reported that the proportion of deaths attributed to pneumonia and influenza was above the epidemic threshold in the USA.

Updates from WHO are pending. As of February 11, influenza activity continues to be high and increasing in Europe. The dominant influenza virus is still pandemic H1N1, co-circulating with influenza B. Hospital admissions due to influenza are declining in Western Europe but increasing in Eastern Europe. In Western Europe, severe cases are in 15-64 year old age range and mostly associated with pandemic H1N1. The circulating strains are overall well matched to the current influenza vaccine. In the United Kingdom, influenza activity continues to decline, with influenza B as the predominant virus. In North Africa and the Middle East, influenza activity appears to have peaked, though Algeria is showing an increase. Pakistan, Iran, and Oman reported high influenza positivity in specimens and equal co-circulation of pandemic H1N1 and type B viruses. In North Asia (including Mongolia, northern China, the Republic of Korea, and Japan), influenza activity has recently peaked and is now declining. In recent weeks, however, Mongolia and northern China reported an increase in pandemic H1N1 detection without a significant increase in the ILI indicator. Japan is reporting a sharp increase of ILI activity but fewer positive detections of influenza viruses than in previous weeks.

http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1287147913271

http://www.who.int/csr/disease/influenza/2011_02_11_GIP_surveillance/en/index.html

Avian Influenza: As of February 9, 2011, one new human case of A/H5N1 was reported. A 5-year-old female with exposure to sick poultry developed symptoms on January 29, was hospitalized on February 3, and died 12 hours following admission. More details and a complete tally of A/H5N1 detections can be found at the links below:

http://www.who.int/csr/don/2011_02_09/en/index.html

www.who.int/csr/disease/avian_influenza/en/

Influenza Web Sites

Yukon H&SS	*http://www.hss.gov.yk.ca/*
PHAC	*http://www.phac-aspc.gc.ca/index-eng.php*
FluWatch (PHAC)	*http://origin.phac-aspc.gc.ca/fluwatch/*
BCCDC Influenza Information	*http://www.bccdc.ca/dis-cond/a-z/_f/Flu/default.htm*
US CDC	*http://www.cdc.gov/flu/*
WHO	*http://www.who.int/topics/influenza/en/*

BCCDC Influenza Surveillance Report
http://www.bccdc.ca/discond/DiseaseStatsReports/influSurveillanceReports.htm

Acronyms

BCCDC	BC Centre for Disease Control
CDC	Centres for Disease Control (US)
ILI	Influenza-Like Illness
OTC	Over the counter
pH1N1	Pandemic H1N1 influenza or swine origin influenza
PHAC	Public Health Agency of Canada
WHO	World Health Organization

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